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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,861	10/22/2001	Keiji Yurugi	Q66372	7705
23373	7590	07/24/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			PUTTLITZ, KARL J	
			ART UNIT	PAPER NUMBER
			1621	

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/982,861

Applicant(s)

YURUGI ET AL.

Examiner

Karl J. Puttlitz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 8, 10, 13, 16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 10, 13, 16 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The rejection under section 112, second paragraph is withdrawn since Applicant has canceled claims 11, 12 and 14. Claim 13 has been amended to include process steps.

The rejection under section 103 is maintained and repeated below:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 10, 13, 16, 18-21. rejected under 35 U.S.C. 103(a) as being unpatentable over each of GB 976304 (GB (304), U.S. patent No 2,692,256 to Bauer, or U.S. Patent No. 6,384,146 to Ruckenstein et al. (Ruckenstein) in view of *Kirk-Othmer Encyclopedia of Chemical Technology*, Acrylic Acid and Derivatives.

The primary references each teach preparation of vinyl group-containing (meth)acrylic esters, see example 5 of GB 304, example 1 of Bauer and example 2 of Ruckenstein.

The claims also require that the total amount of the radical polymerization inhibitor and the vinyl ether group-containing (meth)acrylic ester is not less than 95% by weight relative to the vinyl ether group-containing (meth)acrylic ester.

The claims also require storing, transporting, preparing, and purifying the vinyl ether group-containing (meth)acrylic ester under light-proof conditions and oxygen concentration of 0.01 to 15%. It is for this proposition that the examiner joins Kirk Othmer. Specifically, this reference teaches additions akin to that covered by the claims, see page 347. In the esterification process of acrylic acid derivatives, polymerization inhibitors are used, see page 355. It is noted that in the conduits for such purification, the light-proof and oxygen content requirements are met. Those of ordinary skill would expect that the combination of polymerization inhibitor and ether group-containing (meth)acrylic ester would be in the claimed range during and after the purification process, and is therefore, prima facie obvious.

Response to Arguments

Applicant argues that none of the cited references nor the Kirk-Othmer Encyclopedia disclose or suggest the total amount of the radical polymerization inhibitor and the vinyl ether group-containing (meth)acrylic ester relative to the vinyl ester group-containing (meth)acrylic ester composition. In this same regard, Applicant argues that none of the examples described in the cited references disclose a vinyl ester group-containing (meth)acrylic ester composition which satisfies the ratio of the total amount of the radical polymerization inhibitor and the vinyl ether group-containing (meth)acrylic ester relative to the vinyl ester group-containing (meth)acrylic ester composition recited in the present claims. However, it can be expected that a purified vinyl ester group-containing (meth)acrylic ester composition has the required amounts of radical

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polymerization inhibitor and the vinyl ether group-containing (meth)acrylic ester. For example, the claims do not even require the presence of the polymerization inhibitor. All the claim requires is that some combination of radical polymerization inhibitor and the vinyl ether group-containing (meth)acrylic ester be at least 95%. In this regard, those of ordinary skill would expect that a purified vinyl ether group-containing (meth)acrylic ester composition be at least 95%, as disclosed in the references.

Applicant also argues that the references do not teach or suggest the required concentration of oxygen in a gas phase in contact with the vinyl ether group-containing (meth)acrylic ester composition. However, the claims do not actually require that the composition be in contact with a gaseous phase (the claim states "the gaseous phase in contact with a the vinyl ether group-containing (meth)acrylic ester"). Therefore, any the vinyl ether group-containing (meth)acrylic ester in solution would satisfy the claim, i.e., not in contact with a gaseous state, notwithstanding the advantages taught in the specification regarding concentrations of oxygen.

The rejection to claim 8 has been withdrawn since the references do not teach or suggest using reagents that contain compounds required by claim 8. therefore, claim 8 is allowed.

The Kirk-Othmer reference has been place on a PTO Form 892.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl J. Puttlitz whose telephone number is (571) 272-0645. The examiner can normally be reached on Monday to Friday from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page, can be reached at telephone number (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karl J. Puttlitz
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